

# VOLTAGE TOLERANT CIRCUIT FOR PROTECTING AN INPUT BUFFER

## ABSTRACT OF THE DISCLOSURE

5 [0052] An invention is disclosed for protecting an input buffer. A current from a p-supply to an input buffer is lowered when an input voltage to the input buffer is tolerant HIGH. The p-supply being a  $V_{DD}$  voltage supplied to a p-channel transistor in the input buffer. In addition, the p-supply is set to a particular voltage when the input voltage to the input buffer is LOW, the particular voltage being at a specific value such that input transistors within the input buffer do  
10 not experience overstress voltages. Optionally, p-supply can be prevented from supplying current to the input buffer when an input voltage to the input buffer is tolerant HIGH.